SANDS RANGE SITE

1. TOPOGRAPHY

a. This site is on nearly level to rolling glacial till plains and lake plains. Slope gradients are commonly from one to 15 percent.

2. SOILS

- a. These are deep, well or excessively drained, coarse textured soils. Permeability is rapid and available water capacity is low to moderate. Soils on this site are highly susceptible to wind erosion.
- b. Soil taxonomic units common to this site are:

Dickey loamy sand and loamy fine sand Hecla loamy fine sand and fine sand Maddock loamy fine sand and loamy sand

Refer to Section II-A for a complete list of soil taxonomic units and range sites.

3. POTENTIAL VEGETATION

- a. Both cool and warm season midgrasses dominate the general appearance of this site. Principal species are needleandthread, prairie sandreed, sand bluestem, and porcupinegrass. Other species are western wheatgrass, blue grama, sand dropseed, green needlegrass, bearded wheatgrass, Kentucky bluegrass, and upland sedges. A variety of forb species make up about 10 percent of the total herbage production. Shrubs such as prairie rose, leadplant amorpha, and fringed sagebrush occur in small amounts.
- b. Continued heavy grazing by cattle results in a decrease of prairie sandreed, sand bluestem, western wheatgrass, porcupinegrass, green needlegrass, and bearded wheatgrass. Needleandthread intially increases and then decreases under heavy grazing. Species that increase are blue grama, sand dropseed, Kentucky bluegrass, upland sedges, and undesirable forbs.

Further deterioration of the site results in a dominance of short grasses, upland sedges, fringed sagebrush, and undesirable forbs. "Blowouts" occur on steeper slopes.

c. Approximate total annual production of this site in excellent condition is from 2300 to 3100 pounds of air-dry herbage per acre, depending on growing conditions.

d. A detailed description of the vegetation in excellent condition is as follows:

Relative Percent Composition of the Potential Vegetation

	Mean	Mean Productivity	
	lbs/acre	% composition	
Grasses			
Needleandthread	663	25	
Prairie sandreed	397	15	
Western wheatgrass	133	5	
Sand bluestem	133	5	
Blue grama	133	5	
Porcupinegrass	132	5	
Green needlegrass Prairie junegrass Little bluestem Sand dropseed Bearded wheatgrass Canada wildrye	132	5	
Kentucky bluegrass Other grasses	265	10	
Grasslikes		•	
Penn sedge			
Threadleaf sedge	265	10	
Other sedges			
Forbs Purple prairieclover Green sagewort Stiff goldenrod Hairy goldaster Purple coneflower Silky prairieclover Other forbs	265	10	
Shrubs and half-shrubs Fringed sagebrush Prairie rose Leadplant amorpha Other shrubs	132	5	
Total	2650	100	

4. DOMESTIC LIVESTOCK GRAZING VALUE

a. This site is suitable for both cattle and sheep grazing. Both cool and warm season plants are available for grazing. The best season of use is summer, although the site can be grazed during spring and fall. This site is subject to wind erosion when heavily grazed and is difficult to reestablish under eroded conditions.

5. WILDLIFE NATIVE TO THE SITE

a. This site is used by white-tailed deer and antelope for forage. Small mammals commonly found are the badger, jackrabbit, and coyote. Upland birds using this site are sharp-tailed grouse and mourning dove. Other birds found on this site are upland plover, lark bunting, horned lark, meadowlark, and the chestnut-collared longspur.

6. ESTHETIC AND RELATED VALUES

a. This site adds to the scenery of the prairie grasslands in spring and summer with its array of flowering plants. Recreational activities associated with this site are hunting, hiking, and plant study.

7. HYDROLOGIC CHARACTERISTICS

a. Runoff from this site is slow. The soil has a high rate of water transmission.

8. A TYPICAL SITE LOCATION IN THIS AREA IS AS FOLLOWS